RAJYA SABHA

Monday, the 4th August, 1997 13 Shravana 1919 (Saka)

.The House met at eleven of the clock. The Deputy Chairman in the Chair.

OBITUARY REFERENCE

THE DEPUTY CHAIRMAN: Hon. Members, I refer with profound sorrow to the passing away of Shri Ramesh-chandra Shankarrao Khandekar on 24th July, 1997, at the age of 81.

Born at Indore in January 1916, Shri Rameshchandra Shankarrao Khandekar had his education at the University of Allahabad, Law College and Gokhale Institute of Economics and Politics at Pune. A lawyer by profession, Shri Khandekar, was associated with several organisations and bodies engaged in the uplift and welfare of the weaker sections of society. He was Secretary of the Madhya Bharat Provincial Marathi Literary Conference in 1952, the All India Marathi Literary Conference in 1961 and the Civil Liberties Union from 1960 to 1962. He was a Member of the Madhya Pradesh High Court Bar Council in 1961, the Indian Central Sugarcane Committee from 1965 to 1966, the Popular Literature Committee of the Ministry of Education and the Committee on Petitions of Rajya Sabha.

Shri Rameshchandra Shankarrao Khandekar represented the State of Madhya Pradesh in this House from April 1962 to April 1968.

We deeply mourn the passing away of Shri Rameshchandra Shankarrao Khandekar.

I request the Members to rise in their places and observe silence as a mark of respect to the memory of the departed.

(Hon. Members then stood in silence for one minute)

THE DEPUTY CHAIRMAN: The Secretary-General will convey to the members of the bereaved family our sense of profound sorry and deep sympathy.

ORAL ANSWERS TO QUESTIONS

Approach of a new solar cycle

*161. SHRI SURINDER KUMAR SINGLA:

DR. SHRIKANT RAM-CHANDRA JICHKAR:

Will the Minister of SCIENCE & TECHNOLOGY be pleased to state:

(a) whether Government are aware that a panel of US Government researchers offered a three year advance warning that a new solar cycle is approaching and human kind better be prepared;

(b) what will this increase in activity on the Sun do to phenomena on Earth;

(c) what will be impact on our lives;

(d) whether Indian Scientists are in touch with the National Oceanic and Atmospheric Administrations Space Environment Centre in Boulder, Colorado; and

(e) if so, what is the reaction of Government to this?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRI YOGINDER K. ALAGH): (a) to (e) A statement is laid on the table of the House.

Statement

Government has seen the summary report of the panel of scientists on new solar cycle project set up by National Oceanic and Atmospheric Administrations (NO A A) Space Science Centre, Boulder with the support of National Aeronautical and Space Administrations Office of Space Science. The objective of

the project is *to* survey forecasts for the amplitude and phasing of the most common indicators of solar and geomagnetic activity and to recommend a forecast.

The activity of the sun follows a cyclic pattern of approximate 11 years periodicity, According to the panel it is expected that during the new solar cycle the solar activity will peak in early 2000 and the solar cycle may be of larger duration. The activity is not expected to exceed maximum recorded activity observed in 1957-58. Geomagnetic activity has been predicted to be intense from 1999 to 2005. Predictions of solar and geomagnetic activity are important for operation of low-earth orbiting satellites, electric power transmission grids, geophysical exploration and high-frequency radio communications and radars. The predictions can form an input towards logistic planning in related programmes and activities.

Indian scientists remain in regular touch with their counterparts in NOAA and other observatories around the globe. Indian scientists have been monitoring the solar activity since 1904 and have made significant contributions in this field.

Indian Government extends support to such scientific studies.

SHRI SURINDER KUMAR SINGLA: Madam, I am extremely happy with the statement that the Indian scientists are regularly contributing to update the Indian people about the new Solar Cycle and that they are in regular touch with their counterparts. The new Solar Cycle project which has been....*(Interruptions).*

उपसभापति : आपके पास तो बड़ा माइक भी हैं। ...(**व्यवधान**)... आप उस आवाज से बोलिए जिसमें आप जीरों-आवर में बोलते हैं।

SHRI SURINDER KUMAR SINGLA: Madam, my question is very I would like to know from the Minister whether it has any relevance for the Indian earth, the people living on the Indian. earth. -What is its | importance? I would also like to know whether the coming up of the new Solar ! Cycle is going to affect the life of the
Indian people. I would also like to know whether the Government of India is I assisting the Indian scientific community to accept the challenges of the new Solar Cytle system.

THE DEPUTY CHAIRMAN: It is having its effect on the mike system. Earthing is taking place. What is happening... *(Interruptions)....*

SHRI SURINDER KUMAR SINGLA: Madam, I did pay a tribute to Indian scientists for their contribution and this is being refelected... *(Interruptions).*^..

SHRI YOGINDER K. ALAGH: Madam Deputy Chairperson, I would like to thank the hon. Member for his comments on Indian scientists. In this particular field, the Indian Institute of Astro Physics is one of the leading observational centres. At Kodaikanal, we have over a 100 years observation of a continuous nature on the activities of the sun. I am very happy to report to the hon. Member that even though we have problems with funds, the work of this Institute being a pure science area, we have given a grant of Rs. 40 crores to the Indian Institute of Astro Physics to set up an observatory in Ladakh at a place called Hanley. This will be a state-of-the-art centre for their kind of work that is being discussed here. Our scientists have been contributing in leading journals of the world in this area and there are a number of institutions which are involved in it. As far as this particular activity is concerned, unfortunately, scientists all over the world still do not have a complete explanation as to why there is this solar cycle. It is measured and it is known that the sun spot follows a cycle. The panel referred to by the hon. Member has predicted that the maximum activity of the. cycles may be there in the years 2000 to 2002.There are

associations of this kind of sun-spot cycles and in this case the panel has said that *here may be a relationship with the work of low orbit satellites or some electricity transmission systems. However, they are expected to firm up this prediction in the near future. In fact, because of this question, over the week-end, we contacted the people in the United States who made this prediction, particularly Prof. Hildred. There is no causal relationship with which one can say this with certainty. In fact, in the scientific field, there is an element of controversy. Some weak relationships have been established and other scientists tend to question this relationship. The Government of India, as I said, supports this scientific activity and we will keep track of the events on a global plane.

SHRI SURINDER KUMAR SINGLA: The only question, Madam, is whether the Government is aware of the increasing warming up of the environment which has its reprecussions on India. Is the direction adopted by Indian scientists to meet the challanges of the' increasing warming up of the globe being supported? Has Government or have scientists firmed up their view on whether there is warming up and on whether it is dangerous to people?

SHRI YOGINDER K. ALAGH: The issue of global warming, to the best of my knowledge, is not directly related to sun spot. It is an issue which relates to the emission of CFC and the depletion of the ozone layer. I am sure the Ministry of Environment will be happy to give a detailed response. We can always send him the detailed tracking that the Government is doing of the ozone layer.

THE DEPUTY CHAIRMAN: What really is there on his mind which he wants to ask, as a student of science, I can understand. He wants to ask whether the solar cycle is going to add to the wanning and if it is going to add to earths warming, then are we prepared for it because then the ocean levels will rise and a lot of islands may be eaten up by the wean. Perhaps, this is what is there on his mind.

SHRI YOGINDER K. ALAGH: I know, Madam Chairperson; but these are two distinct phenomena. We know, we have records of sun-spot cycle of almost 200 years. The phenomenon of earth warming is a phenomenon which is related to certain environmental problems which have arisen in the recent past. The two are not related. There is no co-relation . There is no scientific relationship anybody has talked about.

THE DEPUTY CHAIRMAN: You have got a note. So you might as well refer to it.

SHRI YOGINDER K. ALAGH: Madam Chairperson, with due humility I say that I happen to be a Special Adviser to the U.N. Conference of Environment and Development and can answer tins question with a little bit of confidence without referring to any notes.

THE DEPUTY CHAIRMAN: Good, we are not concerned just now. about environment. We want to know about the sun-spots because Prof. Chandrasekhar, the Nobel laureate got his recognition on these only; the black holes and the sun spots.

PROF. RAM KAPSE: Hon. Chairperson, the real thrust of the question is different. We want to know what our reaction today is as far as the warning by U.S. scientists is concerned. Are we prepared for 2000 to 2002 and what is the opinion of the Indian scientists as far as the U.S. warning to the globe is concerned?

SHRI YOGINDER K. ALAGH: As I explained in the reply to the first supplementary, the report itself that we are referring to — we don't go by the newspaper reports; we have the full report -the first thing is we track these things in a certain amount of detail. It by itself

that they do expect that the next sun-spot cycle will be of a magnitude which is higher than in the past. But, this prediction is to be confirmed as we go along, and they expect to take some more time to do it. The second thing is, that they are saying that if this is at the maximum then there have been in the past relationships, relationships which people have established of a statistical nature which may affect things like low orbiting satellites or power transmission grids or radio transmission frequenciues. Now we have noted that; this will be tracked. But these relationship, are, in many cases, of a weak kind; the statistical relationships, because we don't really have an underlying causal model...

PROF. RAM KAPSE: We are not concerned with the cause but the effect.

SHRI YOGINDER K. ALAGH: I am talking about the effect; please listen to me. The effects that they are talking about can be of a very weak kind. If they had a causal model, they could make a stronger statement. Secondly, there is also a conflicting evidence. So, the best strategy under the circumstances is to track the international litereature on the subject, your own facts have enough strength. That is where I would say that Parliament is very wise when it gives us money on some of these very fundamental issues of science. That is why I would say something like the Rs. 40 crore investment on the Hanley telescope or in the Institute of Astro-Physics, because, as the Chairperson said, there have been many distinguished Indian scientists who have worked on these problems. It is good to track these events to be prepared for any eventuality. That is the best that we can do. And that is the response of our senior scientists at the present stage of affairs.

श्री एस.एस. अहलुवालिया : सिर्फ डाक्टर लोग बोलेंगे?

उपसभापति : सब पढ़े-लिखें लोग बोल रहे हैं। साइंटिस्ट्स बोल रहे हैं।

श्री सुरिन्दर कुमार सिंगला : क्वश्चिन एजुकेटेड आदमी से हैं, मैंडम।

DR. GOPALRAO VITHALRAO PATIL: Madam Chairperson, it is a well-known fact that the sun is the real source of a very great energy and a nuclear reaction, a fusion reaction, is taking place. Therefore, lots of rays are coming on to this earth. They are cosmic rays, sharp rays as well as many other cosmic rays. I would like to know whether we are having more centres to study the impact of these rays on earth atmosphere in the form of weather, tele-communications, in the form of satellites or short distance telecommunications. So, we have two years ahead for installing these facilities. Instead of installing one radio-telescope at one place, the Government should set up more such temporary centres. I would like to know whether the Government is planning to install more such temporary centres of study in various parts of the country so that we can get better information. This is my first question. The second thing is that many studies have been done in this subject. I would like to know whether these studies have revealed anything. The basic research is going on and very fundamental things have been revealed. They have revealed that there is a decay in matter; there is a proton defect. Some such things have been forecast by Indian scientists. I would like to know whether any material is available on the basis of which you can say that this is the opinion of our.
scientists.

SHRI YOGINDER K. ALAGH: Madam Chairperson, there are a number of Indian scientific institutions which track the activities of the solar cycle. The Indian Institute of Astrophysics is one. The PRL at Ahmedabad, from where I come, is another. The Udaipur Solar Laboratory is the third one. Then there is the Tata Institute of Fundamental Research in Mumbai. In many universities such as the Osmania University, the

BHU, the Punjabi University, Patiala, etc., a series of research programmes are going on and we support- these activities. Now at this stage, it is not necessary for us to spend more money in setting up more activities. One thing that I want to make clear is that the whole question of sea-warming is not related to the solar cycle, the question of nuclear fusion is a different question from that of the sun-spot cycle, because the explanations that people have given are in terms of the magnetic field in the sun and the problems it may create with convection principles on its surface. But, these are also, as I have said, not any conclusive kinds of studies. So, we are tracking these events. Our scientists have made some very brilliant contributions in this field. I can list some of them. The Chairperson herself has listed a great scientist. We have also been making contributions in some of the best scientific journals in the world. I do not want to take the time of the House in this. But, I want you to rest assured that this is an area that we track and that we have the capability to do this. In fact, I think, there is a lot of global interest in collaborating with us in this area. The Members can remain rest assured on this.

श्री एस.एस. अहलुवालिया : उपसभापति महोदया, मैं मंत्री महोदय से जानना चाहूंगा कि उन्होने अपने जवाब में लिखा हैं कि "भू-चुम्बकीय क्रियाशीलता की 1999 से 2005 तक तक तीव्र होने का पूर्वानुमान लगाया गया हैं"। क्या इसका इफैक्ट धरती के गुरूत्वाकर्षण पर भी पड़ेगा? मैं ऐज़ ए ले मैंन पूछ रहा हूं क्योंकि जो जवाब आप दे रहे हैं वह सारा भारत और सारा विश्व देख रहा हैं तो क्या उस पर असर पड़ेगा? दूसरा उन्होने कहा हैं कि "सौर एवं भू-चुम्बकीय क्रियाशीलता के पूर्वानुमान निचली भू-कक्षा के उपग्रहों तथा विघुत शाक्ति संचारण ग्रिड़ो, भू-भौमिक अन्वेषण तथा उच्च-आवृत्ति रेडियों संचार तथा राडार के संचालन के लिए महत्वूपर्ण हैं"।..

उपसभापति : आप अंग्रेजी में बोल दीजिए। क्योंकि यह टैक्रीकल वर्ड्स हैं, इसलिए कह रही हूं।

श्री एस.एस. अहलुवालिया : महोदया, हर टैक्रीकल वर्ड का हिन्दी में अनुवाद हैं। I can put this question in English *(Interruptions)*... But, I want to put this question in Hindi because I want the hon. Minister to reply to my question in Hindi so that a layman who is watching this programme is able to understand his reply. ...*(Inter ruptions)*...

THE DEPUTY CHAIRMAN: Now Ix have become a lay person because I learnt the technical terms in English only.

... *(Interruptions)*...

SHRI S.S. AHLUWALIA: Through this House, we share information with our people.

मैं जानना चाहूंगा कि क्या हमारा ऐंटायर कम्युनिकेशन सिस्टम जो सैटलाइट पर निर्भर करता है, क्या हमारे सैटलाइट जो लॉच किये हुए हैं जिसके माध्यम से हमारा कम्यूनिकेशन सिस्टम काम करता हैं, जो कुछ परिवर्तन हो रहा हैं क्या उसका सामना करने के लिए वह समर्थ हैं । महोदया, मेरा तीसरा (ग) प्रश्न यह हैं कि खगोलशस्त्रियों ने सौर सर्किल के बारे में पहले ही इसका अनुमान लगा रखा हैं और हमारे यहां सौर के सर्किल को सबसे पहले इण्डियन ज्योतिष शास्त्रियों के ज्नोडिक में गिना जाता हैं। मेंष राशि से मीन राशि तक 12 ग्रहों में गिना जाता हैं। इस पर जो 365 डेज का सर्किल होता हैं तो क्या इसका एक साल के 365 दिनों में कोई प्रभाव देखा जाएगा और उसमें क्या डिग्री का परिवर्तन होंगा? इसके बारे में क्या मंत्री जी बताने की कृपा करेंगे?

THE DEPUTY CHAIRMAN: We have three hundred sixty five point some days in a year. That is the reason why we have a leap year.

श्री इकबाल सिंह : मंत्री जी ज्योतिष की बात जरूर बतायें।

उपसभापति : आप किसकी बात कर रहे हैं। आप ज्योतिष की बात कर रहे हैं?

I do not think the Minister come prepared for that.

श्री योगेन्द्र के. अलघ : महोदया, इस संसपोट

Ffl l^ साइकल का ग्रेविटेशन के साथ कोई रिलेशनशिप नहीं हैं। दूसरा सवाल जो आदरणीय सदस्य का हैं वह बहुत इम्पोर्टेंट सवाल हैं। इसरो इस एरिया में काफी काम करता हैं। फार एक्जाम्पल – यह लेबोरेटरी हैं जहां से यह फारकास्ट आई हैं उसके साथ उनका कोलेबरेशन हैं और उनकी से सारी मेहती हैं। यह गुजराती वर्ड हैं..

उपसभापति : यह ठीक हैं। मेहती इज करेक्ट।

श्री योगेन्द्र के. अलघ : वह सारी इनफारमेशन उनके पास हैं। इसलिए वह इस बात पर पूरे चौकन्ने रहेंगे। मैं नहीं मानता हूं कि संसपोट साइकल का सोलर साइकल के ऊपर, जिस तरह से माननीय सदस्य ने उसको डिलाइन किया हैं, उसके ऊपर कोई इम्पेक्ट होगा।

I think, we have learnt enough science. I j am very happy that there were questions I like this. ...*(Interruptions)*...

श्री एस.एस. अहलुवालिया : महोदया, एक मिनट मैं क्षमा चाहूंगा ...

पसभापति : आप ज्योषि की बात नहीं करिए।

श्री एस.एस. अहलुवालिया : महोदया, मंत्री जी ने खुद कहा हैं कि लम्बी अवधि का साइकल होगा। आपने खुद अपने जवाब में कहा हैं कि यह साइकल लम्बी अवधि का होगा। अब आप सोलर की बात क्यों कर रहे हैं?

SHRI YOGINDER K. ALAGH: This is the revolution of the earth around the Sun in 365 days and is not affected by the Sun spot cycle.

THE DEPUTY CHAIRMAN: There is a revolution and there is revolving. There are two things. Okay, now, let us move to the next question.

Revival of Burn Standard Company Limited

*162. SHRI DIPANKAR MUKHERJEE: SHRI BRATIN SENGUPTA:

Will the Minister of INDUSTRY be pleased to state:

(a) the status of revival plan of Burn Standard Company Limited;

(b) whether Draft Rehabilitation Scheme is being circulated for the consent of all concerned;

(c) if not, the reasons for the delay;

(d) whether Government/ Management have formulated any revival scheme in consultation with the Operating Agency; and

(e) if so, the salient features of the scheme and by when it is likely to be approved by Government?

THE MINISTER OF INDUSTRY (SHRI MURASOLI MARAN): (a) to (e) A statement is laid on the Table of the House.

Statement

(a) to (e) BIFR has directed Industrial Investment Bank of India, the Operating Agency (OA) to prepare a draft rehabilitation scheme for circulation. A draft rehabilitation scheme is under preparation by OA in consultation with Government, management and other concerned parties. The question of approval would arise once the scheme is finalised.

SHRI DIPANKAR MUKHERJEE: Back to the ground from a new solar cycle. This is an old plant. This is a plant which manufacturers wagons and refractories covering four States—West Bengal, Bihar, Tamil Nadu and Madhya Pradesh. This was referred to the B.I.F.R. in November, 1994. I am aware that the Ministry is very seriously considering various options for making a rehabilitation plant for this unit. As we all know, and the hon. Minister also many a time said on the floor of the House, the time is the essence of any revival. If the time is the essence, my question relates to the time factor only. As far as I could see from the B.I.F.R. hearings, there are hearings on 29th January, 1996, 5th July, 19% and 17th October, 1996, and on all these occasions, the Bench had asked the Government to take not more than two